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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Harri Vatanen

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05/31/2005

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EXAMINER

MURPHY, RHONDA L

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/954,932

Applicant(s)

VATANEN, HARRI

Examiner

Rhonda Murphy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 19 is objected to because of the following informalities:

Claim 19, second line: "a" should be replaced with –and–.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 11, 17-19, 20 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Grube et al. (US 5,602,916).

Regarding claims 1 and 17, Grube discloses a method for secure routing of information and addressing of a service and of parties in a telecommunication system that includes a telecommunication terminal (Fig. 1; communication unit 114), a telecommunication network (public data system 104; col. 3, lines 34-39), a service provider (databases 105 and 106) connected to the telecommunication network, a service apparatus (controller 107 and security gateway 103 combined) connected to the telecommunication network for mediating the service (see Fig. 1) and a communication link (112) connecting the telecommunication terminal and the service apparatus (Fig. 1), said method comprising the steps of:

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providing the telecommunication terminal with a terminal-specific unambiguous identifier (col. 4, lines 32-38); addressing the service apparatus from the telecommunication terminal by sending a predetermined connection setup request from the telecommunication terminal to the service apparatus (col. 4, lines 52-59); providing at least one of the service apparatus and the service mediated by the service apparatus with a service-specific unambiguous identifier associated with predetermined keys for at least one of encryption and digital signing (col. 3, lines 59-67, col. 4, lines 1-4); and sending one of a network address of the service provider and information relating to the mediated service from the telecommunication terminal to the service apparatus via the communication link (col. 2, lines 64-67; col. 3, lines 1-25; also refer to col. 4, lines 52-59).

Regarding claims 2 and 18, Grube discloses addressing the service apparatus from the telecommunication terminal by sending the predetermined connection setup request from the telecommunication terminal to the service apparatus via the communication link (col. 4, lines 52-59).

Regarding claim 3, Grube discloses the step of one of encrypting and digitally signing information sent from the telecommunication terminal using the keys associated with the service-specific unambiguous identifier (col. 3, lines 59-67; col. 4, lines 1-6), and wherein said sending step comprises sending the one of encrypted and digitally signed information from the telecommunication terminal to the service provider using an address determined by the telecommunication terminal (col. 3, lines 39-45).

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Regarding claims 4 and 20, Grube discloses controlling the service apparatus (controller 107 and security gateway 103 combined) based on information sent by the service provider (col. 3, lines 1-30).

Regarding claims 11 and 24, Grube discloses an encrypted communication link (Fig. 1; 112) connected to a telecommunication terminal that includes an encryption processor (Fig. 2; 202).

Regarding claim 19, Grube discloses means for at least one of encrypting a digitally signing information sent from the telecommunication terminal using the keys associated with the service-specific unambiguous identifier (col. 3, lines 59-67; col. 4, lines 1-6); and means for sending the at least one of encrypted and digitally signed information over the telecommunication network to a network address determined by one of the telecommunication terminal and the service apparatus (col. 3, lines 39-45).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-6, 8, 12, 16, 21-23 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al. (US 5,602,916) in view of Saito et al. (US 6,275,941).

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Regarding claims 5-6 and 21-22, Grube discloses a service transaction that distributes data information (col. 3, lines 4-10), from the service provider to the service apparatus and telecommunication terminal, when a predetermined condition has been fulfilled (col. 3, lines 13-25; when a request from a registered user is received by the service provider).

Grube fails to explicitly disclose sending a confirmation message.

However, Saito discloses sending, from the service provider (authentication server) to one of the service apparatus (application server) and the telecommunication terminal (client), a confirmation message (col. 2, lines 8-13).

In view of this, it would have been obvious to one skilled in the art to modify Grube's method, by including a confirmation message, so as to acknowledge receipt of a requested service.

Regarding claims 8 and 23, Grube discloses accepting a service request for a service transaction from the telecommunication terminal after the service provider validates the telecommunication terminal as a registered user (col. 3, lines 20-25).

Grube fails to explicitly disclose the service apparatus receiving a confirmation code from the service provider.

However, Saito discloses the service apparatus receiving a confirmation code from the service provider (col. 2, lines 8-13).

In view of this, it would have been obvious to one skilled in the art to modify Grube's method, by allowing the service apparatus to receive the

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confirmation code for a service transaction, in order to provide the service apparatus with the ability to acknowledge the confirmation.

Regarding claim 12, Grube discloses the step of using a key encryption system for one of encrypting and digitally signing information exchanged between at least two of the telecommunications terminal, the service apparatus and the service provider (col. 3, lines 60-67, col. 4, lines 1-6).

Grube fails to explicitly disclose the key encryption system as a public-private key encryption. However, it is well known in the art that encryption/decryption processes requires at least one public key and one private key.

Furthermore, Saito teaches a public-private key encryption system (col. 7, lines 15-21).

In view of this, it would have been obvious to one skilled in the art to modify Grube's method of key encryption, by including a public-private key encryption in order to use a pair of keys, where one is used for encryption and the other for decryption.

Regarding claims 16 and 32, Grube discloses a data network (Fig. 1, public data system 104).

Grube fails to explicitly disclose the data network as the Internet, nor a network address as an IP address. However, it is known in the art that the Internet is a data network that utilizes IP addresses.

Saito teaches an Internet (col. 4, lines 58-60) and therefore, must inherently teach IP addresses.

In view of this, it would have been obvious to one skilled in the art to modify Grube's method to include an IP address, for the purpose of identifying a computer or device on a network.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grube and Saito in view of Isomursu et al. (US 6,370,389).

Regarding claim 7, as described in the rejection of claims 5-6 and 21-22, the combined method of Grube and Saito disclose a sending, from the service provider to one of the service apparatus and the telecommunication terminal, a confirmation message for a service transaction.

Grube and Saito fail to explicitly disclose the confirmation being sent as an SMS message.

However Isomursu discloses sending SMS messages (col. 3, lines 18-23).

In view of this, it would have been obvious to one skilled in the art to modify Grube and Saito's method, by including a SMS message as the confirmation message, in order to quickly send a confirmation message that does not utilize the voice channel at all, or at least not continuously.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube in view of Schuster et al. (US 6,857,072).

Regarding claim 9, Grube discloses a radio frequency communication link (Fig. 1; 112) for providing wireless communication.

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Although, Grube discloses an RF link, Grube fails to disclose the RF link as a Bluetooth connection. It is known in the art that Bluetooth utilizes a short range RF communication link.

Furthermore, Schuster teaches a Bluetooth communication connection (Fig. 1, link 109; col. 6, lines 1-3).

In view of this, it would have been obvious to one skilled in the art to modify Grube's method, by including a Bluetooth communication link, in order to allow for short-range communication between a terminal and service apparatus.

Regarding claim 10, Grube discloses a communication link (Fig. 1; 112) for providing wireless communication.

Grube fails to disclose the communication link as an infrared communication connection. It is known in the art that infrared connections are used in short-range wireless communication.

Schuster teaches an infrared communication connection (Fig.1, link 109; col. 5, lines 66-67).

In view of this, it would have been obvious to one skilled in the art to modify Grube's method, by including an infrared communication link, in order to allow for short-range communication between a terminal and service apparatus.

8. Claims 13 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al. (US 5,602,916).

Regarding claim 13, Grube discloses a wireless protocol used in communications between the telecommunications terminal and one of the

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service apparatus and the service provider (a wireless protocol is inherent in a wireless communication system).

Grube fails to explicitly disclose WAP as the wireless protocol used in the communication system.

However, since Grube's wireless communication system inherently includes a wireless protocol, it would have been obvious to one skilled in the art to incorporate WAP as the wireless protocol, so as to enable users to access information instantly via a handheld wireless device.

Regarding claim 30, Grube discloses a service apparatus as a controller 107 and gateway 103 combined. It is known in the art that controllers and gateways are types of computers.

Therefore, it would have been obvious to one skilled in the art to include a service apparatus as a computer, for the purpose of responding to and performing functions.

9. Claims 14 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube in view of Liao et al. (US 6,292,833).

Regarding claim 14, Grube discloses a service provider that uses one of encryption and digital signing keys associated with unambiguous identifiers.

Grube fails to disclose the service provider communicating with a trusted third party that maintains a database containing one of encryption and digital signing keys.

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However, Liao discloses a service provider (remote service) communicating with a trusted third party (col. 11, lines 10-12). Additionally, it would have been obvious to one skilled in the art to realize that a trusted third party maintains a database containing encryption or digital signing keys, in order to store and verify service identity information.

In view of this, it would have been obvious to one skilled in the art to modify the method of Grube, by including a trusted third party that maintains a database, to provide a remote entity with the ability to store and validate identity information.

Regarding claim 25, Grube discloses a service apparatus and service provider communicating over the telecommunications network.

Grube fails to disclose a trusted third party.

However, Liao discloses a trusted third party that communicates with one of the service apparatus and the service provider over the telecommunications network (col. 11, lines 10-12).

In view of this, it would have been obvious to one skilled in the art to modify the method of Grube, by including a trusted third party communicating with the service apparatus or service provider, to provide a remote entity with the ability to validate identity information.

10. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grube in view of Isomursu et al. (US 6,370,389).

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Regarding claim 27, Grube discloses a telecommunications terminal comprising a mobile station (Fig. 1, communication unit 114).

Grube fails to disclose the mobile station as having a connected subscriber identity module (SIM).

However, Isomursu discloses a subscriber identity module (col. 8, line 8).

In view of this, it would have been obvious to one skilled in the art to modify Grube's method by including a SIM, for the purpose of securely storing the key that identifies a mobile subscriber.

11. Claims 28, 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube in view of Fox et al. (US 5,790,677).

Regarding claims 28 and 31, Grube discloses a service apparatus capable of performing transactions. Grube fails to disclose the service apparatus as an automated teller machine. An ATM machine is a service apparatus capable of performing transactions.

Furthermore, Fox discloses an automated teller machine (col. 6, line 12). Therefore, it would have been obvious to one skilled in the art to include an ATM machine as the service apparatus, for the purpose of performing transactions to withdrawal cash.

Regarding claim 33, Grube discloses a telecommunications network as a data network. Grube fails to disclose the telecommunications system as a bank payment network.

Fox discloses a bank payment network (col. 6, lines 11-14).

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In view of this, it would have been obvious to one skilled in the art to modify Grube's method, by including a bank payment network for the purpose of enabling a user to perform banking transactions using a mobile device.

12. Claims 15 and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Grube in view of Ober et al. (US 6,654,465).

Regarding claim 15, Grube discloses the step of sending a request, from one of the service provider and the service apparatus, to a database (col. 3, lines 39-45) and also discloses encryption and digital signing keys associated with the unambiguous identifiers.

Grube fails to disclose sending a request for keys to a trusted third party that maintains a database containing one of encryption and digital signing keys associated with the unambiguous identifiers.

However, Ober teaches a request for keys to a trusted third party (col. 5, lines 39-51). Additionally, it would have been obvious to one skilled in the art to realize that a trusted third party maintains a database containing encryption or digital signing keys, in order to store and verify service identity information.

In view of this, it would have been obvious to one skilled in the art to modify the method of Grube, by requesting keys from a trusted third party that maintains a database, to provide a remote entity with the ability to store and validate identity information.

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Regarding claim 26, Grube discloses means for one of the service provider and the service apparatus to send a request for one of encryption and digital signing keys associated with the unambiguous identifiers (col. 3, lines 39-45, 59-65).

Grube fails to disclose the service provider or service apparatus sending a request to a trusted third party.

However, Ober discloses sending a request to a trusted third party (col. 5, lines 39-45).

In view of this, it would have been obvious to one skilled in the art to modify the method of Grube, by including a trusted third party that receives a request, for the purpose of providing a remote entity with the ability to validate identity information.

13. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grube in view of Price et al. (US 5,561,282).

Regarding claim 29, Grube discloses a service apparatus capable of performing transactions. Grube fails to disclose the service apparatus as a cash register system. A cash register system is a service apparatus capable of performing transactions.

Furthermore, Price discloses a cash register handling transactions (col. 28, lines 65-67; col. 29, lines 1-4).

Therefore, it would have been obvious to one skilled in the art to include a cash register as the service apparatus, for the purpose of performing transactions involving purchases.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Birgersson (US 6,138,009) discloses a system and method for customizing wireless communication units.

*Hsu et al. (US 6,587,684) discloses a digital wireless telephone system for downloading software to a digital telephone using wireless data link protocol.

*Dent et al. (US 6,256,514) discloses a secure radio personal communications system and method.

*Haverty (US 6,484,258) discloses access control using attributes contained within public key certificates.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy
Examiner
Art Unit 2667

rlm


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